MS4 General Permit
Town of West Hartford 2017 Annual Report
Existing MS4 Permittee
Permit Number GSM 000001
January 1, 2017 – December 31, 2017

This report documents the Town of West Hartford's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2017 to December 31, 2017.

Part I: Summary of Minimum Control Measure Activities

1. Public Education and Outreach (Section 6 (a)(1) / page 19)

1.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
1-1 Implement public education and outreach	Complete	Expand Stormwater educational materials for the Town's website and other Town-wide distribution. Update Town's Stormwater Management Webpage with the new materials.	Develop a public education program	Renée McCue, Public Relations Specialist	July 1, 2018	February 1, 2018	
1-2 Address education/ outreach for pollutants of concern*	In Progress	Create stormwater educational materials to target pollutants of concern.	Identify pollutants of concern and incorporate applicable materials	Renée McCue, Public Relations Specialist	July 1, 2018	July 1, 2018	

1.2 Describe any Public Education and Outreach activities planned for the next year, if applicable.

1.3 Details of activities implemented to educate the community on stormwater

Program Element/Activity	Audience (and number of people reached)	Topic(s) covered	Pollutant of Concern addressed (if applicable)	Responsible dept. or partner org.
Created educational brochures for all pollutants of concern for the Town's Stormwater Management webpage and for distribution to the public	500 (Anticipated)	Impacts from fertilizer use, household hazardous waste, septic system failures, and sanitary cross connections	Nitrogen, Bacteria, and Mercury	Renée McCue, Public Relations Specialist

2. Public Involvement/Participation (Section 6(a)(2) / page 21)

2.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
2-1 Comply with public notice requirements for the Stormwater Management Plan	Complete	Stormwater Management Plan available to the public on Town's website	Make Stormwater Management Plan available to the public	Duane Martin, Town Engineer	April 3, 2017	April 3, 2017	
2-2 Comply with public notice requirements for Annual Reports	Complete	Latest annual report available to the public on Town's website	Make the latest annual report available to the public	Duane Martin, Town Engineer	February 15, 2018	February 15, 2018	
2-3 Established stormwater committee	Ongoing	Several meetings with committee members to assign and discuss progress on upcoming BMP's	Provide forum to coordinate SWMP implementation across depts. and commissions	Duane Martin, Town Engineer	February 15, 2018	February 2018	

2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.

Hold periodic meetings with stormwater management committee as needed to discuss BMP status. Update public education materials as needed.

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	April 3, 2017	https://www.westhartfordct.gov/gov/departments/engineering/stormwater.asp
Availability of Annual Report announced to public	Yes	January 31, 2018	https://www.westhartfordct.gov/gov/departments/engineering/stormwater.asp

3. Illicit Discharge Detection and Elimination (Section 6(*a*)(3) and Appendix B / page 22)

3.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
3-1 Develop written IDDE program	In progress	Develop IDDE program with implementation schedule	Develop written plan of IDDE program	Duane Martin, Town Engineer	July 1, 2018	July 1, 2018	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	In progress	Develop mapping and database for 50% of priority area	Develop stormwater drainage map and database	Duane Martin, Town Engineer	July 1, 2019	July 1, 2019	
3-3 Implement citizen reporting program	Complete	Created module in existing Mobile 311 system to include stormwater issues	Develop citizen reporting program	John Phillips, Public Works Director	Jul 1, 2018	July 1, 2018	
3-4 Establish legal authority to prohibit illicit discharges	In progress	Establish legal authority	Establish legal authority	Kimberly Boneham, Deputy Corporation Counsel	Jul 1, 2018	July 1, 2018	
3-5 Develop record keeping system for IDDE tracking	In progress	Develop IDDE tracking system	Develop IDDE tracking system	Todd Dumais, Town Planner	July 1, 2018	July 1, 2018	
3-6 Address IDDE in areas with pollutants of concern	In progress	Review impaired water guidance and TMDL's	Develop program to address IDDE in areas of concern	Duane Martin, Town Engineer	July 1, 2018	July 1, 2018	
3-7 Consolidate IDDE tracking spreadsheets	In progress	Develop outfall screening procedure	Develop outfall screening procedure	Duane Martin, Town Engineer	July 1, 2018	July 1, 2018	

3-8 Sanitary Sewer Overflow (SSO) Inventory	In progress	Create and update SSO inventory	Develop and update SSO inventory	Duane Martin, Town Engineer	July 1, 2018	July 1, 2018	

3.2 Describe any IDDE activities planned for the next year, if applicable.

Track all IDDE that are identified by outfall screening/testing process or from citizen or Town staff complaint. Follow procedures created in the written IDDE program using the authority created by our Corporation Counsel.

3.3 List of citizen reports of suspected illicit discharges received during this reporting period.

Date of Report	**Location / suspected source**	**Response taken**

3.4 Provide a record of illicit discharges occurring during the reporting period and SSOs occurring July 2012 through end of reporting period using the following table.

Location (Lat long/ street crossing /address and receiving water)	**Date and duration of occurrence**	**Discharge to MS4 or surface water**	**Estimated volume discharged**	**Known or suspected cause / Responsible party**	**Corrective measures planned and completed** (include dates)	**Sampling data** (if applicable)
107 Hillcrest Avenue	2/27/2013	Surface Water	3,000,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Opposite 212 Trout Brook Drive	2/27/2013	Surface Water	161,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	

Southerly end of Chelton Avenue	2/27/2013	Surface Water	2,045,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	3/12/2013	Surface Water	1,755,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Opposite 212 Trout Brook Drive	3/12/2013	Surface Water	69,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Southerly end of Chelton Avenue	3/12/2013	Surface Water	1,000,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	6/7/2013	Surface Water	2,173,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Opposite 212 Trout Brook Drive	6/7/2013	Surface Water	692,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Southerly end of Chelton Avenue	6/7/2013	Surface Water	3,911,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	6/11/2013	Surface Water	7,776,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Opposite 212 Trout Brook Drive	6/11/2013	Surface Water	1,602,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Southerly end of Chelton Avenue	6/11/2013	Surface Water	10,437,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	6/18/2013	Surface Water	24,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	11/27/2013	Surface Water	190,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	

Southerly end of Chelton Avenue	11/27/2013	Surface Water	183,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Opposite 212 Trout Brook Drive	12/30/2013	Surface Water	6,110 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Southerly end of Chelton Avenue	1/9/2014	Surface Water	638,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	2/6/2014	Surface Water	854,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	3/20/2014	Surface Water	108,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	3/29/2014-4/2/2014	Surface Water	5,329,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Southerly end of Chelton Avenue	3/29/2014-4/2/2014	Surface Water	4,233,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Opposite 212 Trout Brook Drive	4/30/2014	Surface Water	489,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	4/30/2014-5/3/2014	Surface Water	3,473,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	5/1/2014	Surface Water	68,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Southerly end of Chelton Avenue	4/30/2014-5/2/2014	Surface Water	4,283,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Opposite 212 Trout Brook Drive	5/17/2014	Surface Water	797,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	

107 Hillcrest Avenue	12/9/2014-12/11/2014	Surface Water	1,545,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Southerly end of Chelton Avenue	12/9/2014	Surface Water	1,674,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Opposite 212 Trout Brook Drive	12/9/2014	Surface Water	128,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	1/18/2015	Surface Water	193,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	3/11/2015	Surface Water	61,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	3/14/2014-3/17/2014	Surface Water	653,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	3/26/2014-3/28/2014	Surface Water	439,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	4/20/2015-422/2015	Surface Water	2,055,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Southerly end of Chelton Avenue	4/20/2014-4/21/2014	Surface Water	2,569,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Opposite 212 Trout Brook Drive	4/20/2015	Surface Water	175,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	1/10/2016	Surface Water	194,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	2/16/2016	Surface Water	72,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	

107 Hillcrest Avenue	2/24/2016	Surface Water	2,426,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Southerly end of Chelton Avenue	2/24/2016	Surface Water	2,319,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Opposite 212 Trout Brook Drive	2/25/2016	Surface Water	110,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	3/31/2017	Surface Water	1,797,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Southerly end of Chelton Avenue	4/1/2017	Surface Water	1,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	4/4/2014	Surface Water	3,003,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Southerly end of Chelton Avenue	4/4/2017	Surface Water	344,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
Southerly end of Chelton Avenue	4/6/2017	Surface Water	707,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	
107 Hillcrest Avenue	5/5/2017	Surface Water	53,000 Gallons	Metropolitan District Commission	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO	

3.5 Briefly describe the method used to track illicit discharge reports, responses to those reports, and who was responsible for tracking this information.

3.6 Provide a summary of actions taken to address septic failures using the table below.

Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	434
Estimated or actual number of interconnections	#
Outfall mapping complete	98%
Interconnection mapping complete	90%
System-wide mapping complete (detailed MS4 infrastructure)	85%
Outfall assessment and priority ranking	100%
Dry weather screening of all High and Low priority outfalls complete	0
Catchment investigations complete	0
Estimated percentage of MS4 catchment area investigated	0%

3.8 Briefly describe the IDDE training for employees involved in carrying out IDDE tasks including what type of training is provided and how often is it given (minimum once per year).

4. Construction Site Runoff Control (Section 6(a)(4) / page 25)

4.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	In progress	Update legal authority	Update legal authority	Kimberly Boneham, Deputy Corporation Counsel	July 1, 2019	July 1, 2019	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	In progress	Develop and Implement interdepartmental coordination plan	Develop and implement interdepartmental coordination plan	Todd Dumais, Town Planner	July 1, 2018	July 1, 2018	
4-3 Review site plans for stormwater quality concerns	In progress	Perform site plan reviews for stormwater quality concerns	Perform site plan reviews for stormwater quality concerns	Todd Dumais, Town Planner	July 1, 2018	July 1, 2018	
4-4 Conduct site inspections	In progress	Perform site inspections	Perform Site Inspections	Todd Dumais, Town Planner	July 1, 2018	July 1, 2018	
4-5 Implement procedure to allow public comment on site development	In progress	Develop and implement procedure to receive public comments on site development	Implement procedure to receive public comments on site development	Todd Dumais, Town Planner	July 1, 2018	July 1, 2018	
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	In progress	Implement a procedure to notify developers of CTDEEP construction stormwater permit	Implement a procedure to notify developers of CTDEEP construction stormwater permit	Todd Dumais, Town Planner	July 1, 2018	July 1, 2018	

4.2 Describe any Construction Site Runoff Control activities planned for the next year, if applicable.

5. Post-construction Stormwater Management (Section 6(*a*)(5) / page 27)

5.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	In progress	Evaluate current regulations and develop regulations to establish legal authority	Evaluate and develop regulations to establish legal authority	Todd Dumais, Town Planner	July 1, 2018	July 2, 2018	
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	In progress	Enforce current regulations	Enforce current regulations	Todd Dumais, Town Planner	July 1, 2018	July 1, 2018	
5-3 Identify retention and detention ponds in priority areas	In progress	Develop long-term maintenance plan	Develop long-term maintenance plan	Duane Martin, Town Engineer	July 1, 2019	July 1, 2019	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	In progress	Develop long-term maintenance plan	Develop long-term maintenance plan	Duane Martin, Town Engineer	July 1, 2019	July 1, 2019	
5-5 DCIA mapping	In progress	Develop methodology for DCIA calculations	Develop methodology for DCIA calculations	Duane Martin, Town Engineer	July 1, 2020	July 1, 2020	
5-6 Address post-construction issues in areas with pollutants of concern	In progress	Identify projects in catchment areas that discharge to impaired waters	Identify projects in catchments that discharge to impaired waters	Todd Dumais, Town Planner	July 1, 2018	July 1, 2018	

5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	acres
DCIA disconnected (redevelopment plus retrofits)	acres this year / acres total
Retrofits completed	#
DCIA disconnected	% this year / % total since 2012
Estimated cost of retrofits	$
Detention or retention ponds identified	# this year /# total

5.4 Briefly describe the method to be used to determine baseline DCIA.

6. Pollution Prevention/Good Housekeeping (Section 6(*a*)(6) / page 31)

6.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-1 Develop/implement formal employee training program	Complete	Performed employee training on 2/15/18	Complete staff training	John Phillips, Public Works Director	July 1, 2018	July 1, 2018	
6-2 Implement MS4 property and operations maintenance	In progress	Develop, evaluate, and implement maintenance procedures	Develop and evaluate maintenance procedures	John Phillips, Public Works Director	July 1, 2018	July 1, 2018	
6-3 Implement coordination with interconnected MS4s	In progress	Identify and contact interconnected MS4's	Identify and contact interconnected MS4's	Duane Martin, Town Engineer	July 1, 2018	July 1, 2018	
6-4 Develop/implement program to control other sources of pollutants to the MS4	In progress	Develop and implement pollutant source control program	Develop and implement pollutant source control program	Duane Martin, Town Engineer	July 1, 2018	July 1, 2018	
6-5 Evaluate additional measures for discharges to impaired waters*	In progress	Develop and implement procedures for reducing discharges to impaired waters	Develop turf management and source management program	Todd Dumais, Town Planner	July 1, 2018	July 1, 2018	
6-6 Track projects that disconnect DCIA	In progress	Track DCIA percentage	Track DCIA percentage	Todd Dumais, Town Planner	July 1, 2018	July 1, 2018	
6-7 Implement infrastructure repair/rehab program	In progress	Evaluate infrastructure repair and rehabilitate MS4 infrastructure	Evaluate MS4 infrastructure and develop a repair/rehab program	Duane Martin, Town Engineer	July 1, 2018	July 1, 2018	

6-8 Develop/implement plan to identify/prioritize retrofit projects	Not started	Develop retrofit plan	Develop and implement retrofit plan	Todd Dumais, Town Planner	July 1, 2020	July 1, 2020	
6-9 Implement retrofit projects to disconnect 2% of DCIA	In progress	Implement retrofit projects	Implement retrofit projects	Todd Dumais, Town Planner	July 1, 2022	July 1, 2022	
6-10 Develop/implement street sweeping program	In progress	Perform annual street sweeping	Perform annual street sweeping	John Phillips, Public Works Director	July 1, 2018	July 1, 2018	
6-11 Develop/implement catch basin cleaning program	In progress	Develop and implement catch basin cleaning and inspection procedures	Develop and implement catch basin cleaning and inspection procedures	John Phillips, Public Works Director	July 1, 2018	July 1, 2018	
6-12 Develop/implement snow management practices	In progress	Update and implement snow management measures and practices	Develop and update snow management measures and practices	John Phillips, Public Works Director	July 1, 2018	July 1, 2018	

6.2 Describe any Pollution Prevention/Good Housekeeping activities planned for the next year, if applicable.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	February 15, 2018
Street sweeping	
Curb miles swept	3208 miles
Volume (or mass) of material collected	1,154 tons
Catch basin cleaning	
Total catch basins in priority areas	1,770
Total catch basins in MS4	7,600
Catch basins inspected	263
Catch basins cleaned	263
Volume (or mass) of material removed from all catch basins	58 tons
Volume removed from catch basins to impaired waters (if known)	Unknown
Snow management	
Type(s) of deicing material used	Clearlane & Salt
Total amount of each deicing material applied	5,660 tons Clearlane & 600 tons Salt
Type(s) of deicing equipment used	Spreader
Lane-miles treated	5,590 miles
Snow disposal location	187 Dexter Avenue
Staff training provided on application methods & equipment	None
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	Unknown
Reduction in turf area (since start of permit)	Unknown
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	Unknown
Cost of mitigation actions/retrofits	Unknown

6.4 Catch basin cleaning program

Briefly describe the method used to optimize your catch basin inspection and cleaning schedule. [Complete this section for the 2017 Annual Report only]
The Town hired interns to perform visual inspections of the Town's catch basins. They identified the amount of sediment in each catch basin. This information was used to identify and prioritize catch basin cleaning.

6.5 Retrofit program

Briefly describe the Retrofit Program identification and prioritization process, the projects selected for implementation, the rationale for the selection of those projects and the total DCIA to be disconnected upon completion of each project. [Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.]

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years. [Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.]

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years. [Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.]

Part II: Impaired waters investigation and monitoring [This section required beginning with 2018 Annual Report]

1. Impaired waters investigation and monitoring program

1.1 Indicate which stormwater pollutant(s) of concern occur(s) in your municipality or institution. This data is available on the MS4 map viewer: http://s.uconn.edu/ctms4map.

Nitrogen/ Phosphorus ☐ Bacteria ☐ Mercury ☐ Other Pollutant of Concern ☐

1.2 Describe program status.

Discuss 1) the status of monitoring work completed, 2) a summary of the results and any notable findings, and 3) any changes to the Stormwater Management Plan based on monitoring results.

2. Screening data for outfalls to impaired waterbodies (Section 6(i)(1) / page 41)

2.1 Screening data collected under 2017 permit

Complete the table below for any outfalls screened during the reporting period. Each Annual Report will add on to the previous year's screening data showing a cumulative list of outfall screening data.

Outfall ID	**Sample date**	**Parameter** (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	**Results**	**Name of Laboratory (if used)**	**Follow-up required?**

2.2 Credit for screening data collected under 2004 permit

If any outfalls to impaired waters were sampled under the 2004 MS4 permit, that data can count towards the monitoring requirements under the modified 2017 MS4 permit. Complete the table below to record sampling data for any outfalls to impaired waters under the 2004 MS4 permit.

Outfall	**Sample date**	**Parameter** (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	**Results**	**Name of Laboratory (if used)**	**Follow-up required?**

3. Follow-up investigations (Section 6(i)(1)(D) / page 43)

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall	Status of drainage area investigation	Control measure implementation to address impairment

4. Prioritized outfall monitoring (Section 6(i)(1)(D) / page 43)

Once outfall screening has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. Begin monitoring these outfalls on an annual basis by July 1, 2020.

Outfall	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)

Part III: Additional IDDE Program Data [This section required beginning with 2018 Annual Report]

1. Assessment and Priority Ranking of Catchments data (Appendix B (A)(7)(c) / page 5)

Provide a list of all catchments with ranking results (DEEP basins may be used instead of manual catchment delineations).

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank

2. Outfall and Interconnection Screening and Sampling data (Appendix B (A)(7)(d) / page 7)

2.1 Dry weather screening and sampling data from outfalls and interconnections

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies.

Outfall / Interconnection ID	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actions taken

2.2 Wet weather sample and inspection data

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor.

Outfall / Interconnection ID	Sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of concern

3. Catchment Investigation data (Appendix B (A)(7)(e) / page 9)

3.1 System Vulnerability Factor Summary

For those catchments being investigated for illicit discharges (i.e. categorized as high priority, low priority, or problem) document the presence or absence of System Vulnerability Factors (SVF). If present, report which SVF's were identified. An example is provided below.

Outfall ID	Receiving Water	System Vulnerability Factors

Where SVFs are:

1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
2. Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
3. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
4. Common or twin-invert manholes serving storm and sanitary sewer alignments.
5. Common trench construction serving both storm and sanitary sewer alignments.
6. Crossings of storm and sanitary sewer alignments.
7. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
8. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.
9. Areas formerly served by combined sewer systems.
10. Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.
11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).
12. History of multiple local health department or sanitarian actions addressing widespread septic system failures (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).

3.2 Key junction manhole dry weather screening and sampling data

Key Junction Manhole ID	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorine	Surfactants

3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants

3.4 Data for each illicit discharge source confirmed through the catchment investigation procedure

Discharge location	Source location	Discharge description	Method of discovery	Date of discovery	Date of elimination	Mitigation or enforcement action	Estimated volume of flow removed

Part IV: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Chief Elected Official or Principal Executive Officer	Document Prepared by
Print name:	Print name:
Signature / Date:	Signature / Date: